

# Bound pronominals in West Barito languages

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This paper describes and discusses multifunctional bound pronominals in Ngaju and Dohoi, West Barito languages in Central Kalimantan (Austronesian languages in Borneo), on the basis of published descriptive materials and the present author's fieldnotes. Some morphological descriptions on bound pronominals can be found in [Hardeland \(1858\)](#) for Ngaju, and in [Inagaki \(2008\)](#) for Dohoi, but no study to date has sufficiently explored the agreement phenomena of bound pronominals in these languages. First, this paper provides a description on the Ngaju pronominal forms and their behaviors, which supplements to [Hardeland's \(1858\)](#) descriptions. Second, it is claimed that the Dohoi first singular pronominal suffix *-kku* has morpho-phonologically reduced from the Proto Malayo-Polynesian \**ni-ku*/\**n(a)ku* '1SG.GEN' and it has been reanalyzed as consisting of *-k* and the detachable *ku*. Third, this paper demonstrates that in some cases Ngaju and Dohoi show the "systematic covariance" ([Steele 1978](#)) in person-number between bound pronominals and their controllers (=subjects), and concludes that at least the Dohoi subject pronominal suffixes can be seen as more canonical agreement markers rather than "ambiguous agreement markers" ([Siewierska 2004](#)) on the basis of the evidence of their multiple occurrence within the domain of clause.

## 1. Introduction<sup>1</sup>

Bound pronominals belong to the set of personal pronouns and have grammatical meanings (such as person, number, and etc.). In West Barito languages, they are used to express possessor, subject, or object. The agreement phenomena of bound pronominals in these languages have not yet been sufficiently studied. The principal aim of this paper is to determine the status of bound pronominals in West Barito languages, especially their status as agreement markers.

The data on which this paper is based are taken from published Ngaju and Dohoi materials and my fieldnotes on Dohoi. The Ngaju data are referenced by abbreviations 'HD' for [Hardeland's Dictionary \(Hardeland 1859\)](#) and 'HG' for [Hardeland's Grammar \(Hardeland 1858\)](#), followed by page numbers. The Dohoi data consist of naturally occurring examples from folklores or stories and elicited words or sentences. Ungrammatical examples in Dohoi are marked by '\* + *italic typeface*', and awkward ones which are not accepted by all speakers are marked by '%'. Proto-forms are indicated by '\* + upright typeface'.

This paper is organized as follows. Section 2 overviews and describes bound pronominals in Ngaju (§ 2.1) and Dohoi (§ 2.2) from a grammatical perspective. Section 3 explores the agreement phenomena of bound pronominals in these languages, based mainly on the Dohoi data. Concluding remarks are in Section 4.

## 2. Bound pronominals in West Barito languages

Bound pronominals (=suffixes and enclitics) in West Barito languages are productive/frequent in that they are not only high in animacy but also attached to various elements

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such as possessed nouns, prepositions, conjunctions, adverbs/auxiliaries, and verbs.<sup>2</sup> It is lexically and phonologically conditioned whether a suffix or enclitic can be attached (or full form can be postposed) to those various elements. Similarly, the occurrence of the linker suffix *-n*, which is confined to the position before nominals or plural pronominals, is also phonologically (partly lexically) conditioned. Bound pronominals and the linker *-n* basically occur in adnominal possessive constructions and in few non-possessive constructions. Bound pronominals and their full forms in West Barito languages are listed in **Table 1**.

**Table 1. Bound pronominals and their full forms in West Barito languages**

	Ngaju		Dohoi		
	suffix	full form	suffix	enclitic	full form
1st person singular	<i>-ŋku</i>	<i>aku</i>	<i>-k/-kku</i>	<i>=ku</i>	<i>ahku</i>
2nd person singular	<i>-m</i>	<i>ikau</i>	<i>-m</i>	<i>=mu</i>	<i>ihko</i>
3rd person SG/PL	<i>-e</i>	<i>iä</i> (SG)	<i>-i/-u</i>	<i>=ah/=oh</i>	<i>io</i> (SG)

In the following subsection, the descriptions of pronominal suffixes by HG, Hardeland's Grammar of Ngaju (1858) are supplemented or reanalyzed by the present author. Furthermore, in the subsequent subsection, the Ngaju and Dohoi bound pronominals are compared and summarized as West Barito bound pronominals.

Three main morpho-phonological patterns can be found among constructions involving bound pronominals:

**Pattern A:** bare type; neither *n*-deletion process (deleting the base-final *n*) nor the linker is needed; diphthong- or consonant-final base (C)V(C)(C){VV/VC}.

**Pattern B:** *n*-deletion is needed for pronominal suffixation (no linker needed); *n*-final base (C)V(C)(C)Vn

**Pattern C:** neither *n*-deletion nor the linker is needed for singular bound pronominals, but the linker *-n* is needed to be suffixed when a free plural pronoun (or a nominal) postposes to the right of the base/head; monophthong-final base (C)V(C)(C)V.

## 2.1 Pronominal suffixes in Ngaju

### 2.1.1 When attached to possessives (Ngaju)

Bases ending in a diphthong<sup>3</sup> or in a consonant other than *n* can be followed by (a) a free plural possessor pronoun, or (b/c) a bound (basically singular) possessor pronominal suffix (the allomorphy of the 1SG bound form will be discussed below).

<sup>2</sup> Verbal forms such as passive, imperative and transitive verbs may be followed by a bound pronominal (suffix/enclitic). Bound pronominals which attach to passive and imperative forms refer to actors/agents (only the 2SG suffix to imperative forms in Ngaju), while the ones which attach to transitive verbs (= only the 3rd person) refer to undergoers/patients (see for example HG103, 121–122 for imperative forms in Ngaju).

<sup>3</sup> For example, a base ending in a diphthong *paräi* 'rice plant' shows (a) *paräi äwen* 'their rice plant', (b/c) *paräi-ku/-m/-e* 'my/your(SG)/his.her.their rice plant'.

- (1) *arut* ‘boat’
- a. *arut koä* ‘our(DU) boat’, *arut keton* ‘your(PL) boat’, *arut äwen* ‘their(PL) boat’
  - b. *arut-ku* ‘my boat’
  - c. *arut-m* ‘your(SG) boat’, *arut-e* ‘his/her/their boat’

Bases ending in *n* can be followed by (a) a free plural pronoun without any other additional morphological processes, (b) the bound 1SG pronominal suffix “-*gku*” (HG102–103), or (c) the bound 2SG or 3rd person pronominal suffix with the process of deleting the base-final *n*. Note that if the 3rd person pronominal suffix *-e* attaches to an *en*-final base like *djipen* in (2), then the ultimate vowel *e* of the base must be changed into *ä* as *djipä-* in (2c) in order to avoid the vowel doubling \**e-e*.

- (2) *djipen* ‘slave’
- a. *djipen keton* ‘your(PL) slave’, *djipen äwen* ‘their(PL) slave’
  - b. *djipengku* ‘my slave’
  - c. *djipe-m* ‘your(SG) slave’, *djipä-e* ‘his/her/their slave’

Bases ending in a monophthong can be followed by (a) a free plural pronoun with the additional process of suffixing the linker *-n* to the base. They can also be followed by (b) the 1SG pronominal suffix “-*ngku*” (HG102–103), or (c) the 2nd/3rd person pronominal suffix without any other additional morphological processes.

- (3) *huma* ‘house’
- a. *huma-n keton* ‘your(PL) house’, *huma-n äwen* ‘their(PL) house’
  - b. *humangku* ‘my house’
  - c. *huma-m* ‘your(SG) house’, *huma-e* ‘his/her/their house’

As shown in examples above, [Hardeland \(1858:102\)](#) describes three (orthographic) forms *-ku*, *-gku*, *-ngku* for the 1SG pronominal suffix. This paper does not follow this three-way analysis, but posits the underlying form *-ŋku* for the 1SG morpheme, with its two phonologically conditioned allomorphs *-ku/-ŋku*.<sup>4</sup> Thus, this paper analyzes the examples (2b) and (3b) as *djipe-ŋku* (4b) and *huma-ŋku* (4c) respectively. This analysis treats the 1SG pronominal suffix in the same way as other pronominal suffixes (*-m*, *-e*) which require the process deleting the base-final *n* (see (2c)).

- (4)
- |    |                  |             |                                   |            |
|----|------------------|-------------|-----------------------------------|------------|
| a. | <i>arut-ku</i>   | (boat-1SG)  | (suffix-initial <i>ŋ</i> deleted) | ‘my boat’  |
| b. | <i>djipe-ŋku</i> | (slave-1SG) | (base-final <i>n</i> deleted)     | ‘my slave’ |
| c. | <i>huma-ŋku</i>  | (house-1SG) |                                   | ‘my house’ |

<sup>4</sup> In contrast, it can be argued that the 1SG pronominal suffix only has single allomorph *-ku*, which requires the linker *-n* to be added to a monophthong-final base like *huma*, resulting in *huma-n-ku*. At the same time, (either base-final or linker’s) *n* regressively assimilates to the velar plosive *k* of *-ku* and becomes “*ng*” [ŋ], resulting in *huma-ng-ku*. This analysis seems to have the advantage of simplifying the allomorphy analysis, but leaves the critical problem of why only the 1SG bound form (among singular bound pronominals) requires an extra suffix slot for the linker *-n*. Synchronically, the two-way allomorphy analysis (*-ku/-ŋku*) is more reasonable than the single allomorph analysis (*(-n)-ku*) in that the former can avoid the problem of ‘extra suffix slot’ (See also 2.2 for the case of Dohoi).

The allomorph *-ku* is phonologically conditioned, with the underlying velar consonant  $\eta$  of *-ŋku* being deleted immediately after a diphthong or a base-final non-*n* consonant (avoiding CCC, a three-consonant sequence like *tŋk* in (4a)).

In the following, this paper follows the transcription used by the sources (e.g., *ng* for  $\eta$ ).

As noted in Hardeland (1858:84), there are a few exceptional monophthong-final (V-final) words. They can be called ‘exceptional bare type’ in this paper, which reveals **Pattern A** (neither *n*-deletion nor the linker *-n*) not **Pattern C** (linker *-n* for free (pro)nominals) despite its own base-final monophthong. Such ‘exceptional bare type’ bases can take pronominal suffixes in the same way as bare type bases.

- (5) Examples of ‘exceptional bare type’ bases in Ngaju:
- kinship terms (excluding *pahari* ‘brother, sister, relative’ and *äso* ‘grandchild’)
  - kabawa* ‘ability, be able to’
  - äka* ‘place’ (see 2.1.3 for details)
  - kaleka* ‘place’
  - olo* ‘person, human’

Each pattern (**A**, **B** and **C**) of pronominal possessive suffixation in Ngaju can be summarized as in **Table 2**. The **Pattern A’** is phonologically exceptional (bases end in a monophthong, but reveal Pattern A), and the **Pattern C’** is lexically exceptional (bases are kinship terms, but reveal Pattern C).

**Table 2. Each pattern of pronominal possessive suffixation in Ngaju**

Ngaju	gloss	pattern	<i>n</i> -deletion	linker	details
<i>arut</i>	‘boat’	<b>A</b>	NO	NO	base ends in C( $\neq n$ )
<i>paräi</i>	‘rice plant’	<b>A</b>	NO	NO	ends in diphthong
<i>djipen</i>	‘slave’	<b>B</b>	YES	NO	ends in <i>n</i>
<i>huma</i>	‘house’	<b>C</b>	NO	YES	ends in V
<i>mama</i>	‘uncle’	<b>A’</b>	NO	NO	ends in V, kinship term
<i>äso</i>	‘grandchild’	<b>C’</b>	NO	YES	ends in V, kinship term
<i>olo</i>	‘person’	<b>A’</b>	NO	NO	ends in V

### 2.1.2 When attached to prepositions (Ngaju)

Pronominal suffixes can be attached to some prepositions, functioning as the ‘object’ or governee of prepositions. For example, they can be attached to “dative” prepositions *akan* and *dengan* as follows. Notice that singular free pronouns cannot be postposed to the right of these prepositions (HG97). These prepositions reveal the **Pattern B**.

- (6)
- |  |   |
|--|---|
| <i>akan</i> ‘for, to’,                                     | <i>dengan</i> ‘with’  |
| a. <i>aka-ngku</i> (* <i>akan aku</i> ) ‘for me’,          | <i>denga-ngku</i> (* <i>dengan aku</i> ) ‘with me’          |
| b. <i>aka-m</i> (* <i>akan ikau</i> ) ‘for you’,           | <i>denga-m</i> (* <i>dengan ikau</i> ) ‘with you’           |
| c. <i>aka-e</i> (* <i>akan iä</i> ) ‘for him/her/it/them’, | <i>denga-e</i> (* <i>dengan iä</i> ) ‘with him/her/it/them’ |

Contrary to these *n*-final prepositions, V-final ones are supposed to show the **Pattern C**. However, a V-final “dative” preposition *intu* ‘in, with, from’ does not require either *n*-deletion or the linker *-n*. In the first place, it cannot even take either pronominal suffixes or the linker (\**intu-n*). Only free (pro)nouns can follow *intu* as shown in (7).

- (7) *intu* ‘in, with, from’
- a. *intu aku* (\**intu-(ng)ku*) ‘with/from me’
  - b. *intu ikau* (\**intu-m*) ‘with/from you’
  - c. *intu iä* (\**intu-e*) ‘with/from him/her/it/them’

In addition, an ablative preposition *bara* ‘from’ also cannot take either pronominal suffixes or the linker (\**bara-n*) in the same way as *intu* ‘in, with, from’ above.

- (8) *bara* ‘from’
- a. *bara aku* (\**bara-(ng)ku*) ‘from me’
  - b. *bara ikau* (\**bara-m*) ‘from you’
  - c. *bara iä* (\**bara-e*) ‘from him/her/it/them’

By contrast, another ablative preposition *awi* ‘by, from’ (see 2.1.3 for more detail), which is an exceptional bare type like possessed kinship terms (2.1.1) revealing the **Pattern A’**, can take pronominal suffixes as shown in (9a) (glossed as ‘(A)’). However, nothing is specified in the gloss or for the **Pattern** if and only if bound pronominals cannot be attached to a base).

- (9) a. *iä indohop awi -ku / -m / -e* (\**awi-ngku*) (HG102)  
 3SG be.supported by/from-1SG -2SG -3(A’)  
 ‘He was supported by me(1)/you(2)/him.her.them(3).’
- b. *djari lian arut awi keton?* (\**awi-n keton*) (HD307)  
 already given.back boat by/from 2PL  
 ‘Have you already returned the boat? (lit. Was the boat already returned by you?)’

There are some other bare type prepositions which end in a consonant other than *n*.<sup>5</sup> **Table 3** presents an overview of the Ngaju prepositions and their postposed pronominal forms (suffix or full form). ‘✓’ means ‘common’, ‘(✓)’ means ‘uncommon’, and ‘—’ means ‘not attested’.

**Table 3. Prepositions and their postposed pronominal forms in Ngaju**

Ngaju	gloss	pattern	<i>n</i> -deletion	linker	+ suffix	+ full form
<i>akan</i>	‘for, to’	<b>B</b>	YES	NO	✓	—
<i>dengan</i>	‘with’	<b>B</b>	YES	NO	✓	—
<i>intu</i>	‘in, with, from’		NO	NO	—	✓
<i>bara</i>	‘from’		NO	NO	—	✓
<i>awi</i>	‘by, from’	<b>A’</b>	NO	NO	✓	(✓)

<sup>5</sup> The following consonant-final prepositions can take pronominal suffixes: (i) *balikat* ‘on side, next’, *balikat-ku* ‘(sit) next to me’ (HD35); (ii) *darah* ‘near, close’, *darah-ku* ‘(plow) near me/my place’ (HD558), *darah-m* ‘(cleaver) near you’ (HD320); (iii) *talih* ‘to’, *talih-e* ‘(go) to her (place)’ (HD553).

### 2.1.3 When attached to conjunctions (Ngaju)

Many prepositions in Ngaju can also be used as conjunctions which can form adverbial subordinate clauses. A word *awi* ‘by, from’ introduced in 2.1.2 is such a preposition.<sup>6</sup> Pronominal suffixes can also be attached to conjunctions, functioning as the subject of subordinate clauses formed by the conjunctions (HG103, 171–172). The preposition/conjunction *awi* ‘because (of)’ is the exceptional bare type which reveals **Pattern A’**. Note that, as illustrated in (10d) below, full form (*aku* ‘1SG’) may occasionally be postposed to the right of *awi* without any difference of meaning or function. In the following examples, each subordinate clause is bracketed with square brackets [ ].

- (10) a. *pisau hakimbi [awi-ku manetek tabalien]* (HD148)  
cleaver tip.crooked because-1SG(A’) chop ironwood  
‘The cleaver is crooked at the tip [because I chopped ironwood (with it)].’
- b. *piok tromor [awi-m mondok-e]* (HD437)  
crushed drum because-2SG(A’) sit.on-3  
‘The drum is crushed [because you sat on it].’
- c. [*awi-e malangai rindjing*] *kinan aso bari* (HD149)  
because-3(A’) uncover cooking.pan eaten dog rice  
‘[Because he had uncovered the cooking pan,] the rice is eaten by a dog.’
- d. [*awi aku mahujong iä,*] *haru iä manumon* (HD182)  
because 1SG persuade 3SG just.now 3SG follow  
‘[Because I persuaded him,] only now does he accept (it).’

Another conjunction *äka* ‘place, NMLZ.LOC’ may be called ‘relative adverb (of place)’. In this paper, *äka* is labeled ‘NMLZ.LOC’ in line with typological studies on nominalization such as [Shibatani \(2019\)](#) since it does not necessarily require an antecedent as in (11b). The nominalized clauses in (11a, 11c) are in modification-use restricting *haran* and *amak* respectively, whereas the one in (11b) is in NP-use with referring function.

- (11) a. *aku manampa haran, [äka-ku mäkäi uäi]* (HD164)  
1SG make drying.terrace NMLZ.LOC-1SG(A’) dry rattan  
‘I make a drying terrace [on which I dry rattan].’
- b. *awë [äka-m mandjulok-e]?* (HD111)  
who NMLZ.LOC-2SG(A’) hand.over-3  
‘Who did you give it to? (lit. Who is (the person) [to whom you gave it])’
- c. *amak [äka-e batiroh] tilap udju hanja* (HD601)  
mat NMLZ.LOC-3(A’) sleep piled seven eight  
‘The mats [on which he sleeps] are piled up 7 or 8 high.’

<sup>6</sup> The conjunction *awi* ‘because (of)’ in Ngaju has possibly been grammaticalized from ablative (ABL) via the concept of SINCE (TEMPORAL). A grammaticalization pathway ‘ABL > SINCE (TEMPORAL) > CAUSE’ has been proposed on the basis of reasonable grounds. [Kuteva et al. \(2019:43\)](#) list many examples of grammaticalization from ABL into SINCE (TEMPORAL) on the basis of [Haspelmath \(1997\)](#). In addition, [Kuteva et al. \(2019:403\)](#) gives some cases of grammaticalization from SINCE (TEMPORAL) into CAUSE (e.g., “since we last met (Temporal)”, “[s]ince you are not coming with me (Causal)”).

It should be noted that the 3rd person pronominal suffix *-e* does not necessarily function as the subject of a subordinate clause headed by *äka*. In (11c), the suffix *-e* functions as the subject ‘he’, while in (12) below, it is the 2PL pronoun ‘you all’ after *äka-e* that functions as the subject of the following predicate. In such cases, the pronominal suffix *-e* can be considered to refer to the event expressed by the following clause like ‘you all set the rafts’ in (12).<sup>7</sup>

- (12) *kwe äka-e [keton mansandak lanting uüi]* (HD503)  
 where place-3(A’) 2PL detain raft rattan  
 ‘Where is the place where [you all set the rafts loaded with rattan]?’

Neither pronominal suffixes nor the linker *-n* can be attached to nominalizers *idjä* and *awang*, but a free pronoun may be postposed to the right of these nominalizers only when the prepositional nominalized clauses [*idjä/awang* + PP ...] can exhibit an alternative word order (HG109). However, as can be seen in the case of the Dohoi nominalizer (*ijo* (=38), the following examples might be less natural than other examples in Ngaju.

- (13) a. *kilen, olo tä käläh* (HG109)  
 how person DEF healthy  
 [*idjä aku djari manenga tatamba aka-e*?]  
 NMLZ 1SG already give medicine for/to-3  
 ‘How is the person [to whom I gave a medicine] doing, feeling better?’  
 (alternative word order of [*idjä akae aku djari manenga tatamba*])
- b. *aku toh [idjä ikau djari manenga buah aka-e]* (HG109)  
 1SG here NMLZ 2SG already give fruit for/to-3  
 ‘I am the one [to whom you gave the fruit].’  
 (alternative word order of [*idjä akae ikau djari manenga buah*])
- c. *kindjap wäi olo papa dengan ita,* (HG109)  
 often just person bad with 1PL.INCL  
 [*awang ita tau denga-e*]  
 NMLZ 1PL.INCL love with-3  
 ‘People [to whom we show a friendly attitude] are often rude to us.’  
 (alternative word order of [*awang dengae ita tau*])

Another nominalizer *hapa(n)*, which is originally a lexical verb ‘use’, can also take pronominal suffixes. [Hardeland \(1859:161\)](#) includes the form *hapa* as a main entry, cites alternative forms “hapan” and “hanggap” alongside the main entry form, and considers *hapa* as the citation form by putting only “i. q. hapa” (idem quod ‘the same as’ *hapa*) to the entry of *hapan* (p. 162). This paper leaves this ‘citation form issue’ open for the time

<sup>7</sup> A clipped or contracted compound *kwäka* ‘how could’ (irony) consisting of *kwe* ‘where’ + *äka* ‘place’ is very occasionally followed by a pronominal subject suffix.

- (i) *benang manipis, kwäka[-e bunggut]* (HD503)  
 fabric thin how.could-3(A’) long.lasting  
 ‘The clothing fabric is thin, how could it be long-lasting.’

being. Accordingly, *hapa(n)* reveals the **Pattern B** or **C** (*n*-final or monophthong-final base). As shown in (14), the nominalized clauses are ‘related’ to instrument noun phrases *lundjungku* ‘my lance’, *klambim bahalap* ‘your beautiful jacket’, and *arutku idjä hai* ‘my big boat’ respectively.

- (14) a. *meko lundju-ngku [hapa-ngku mamuno bawoi]* (HD363)  
crooked lance-1SG NMLZ.INS-1SG(B/C) fatally.stab wild.pig  
‘My lance, [with which I stabbed a wild pig to death], is crooked.’
- b. *ikau marabak klambi-m bahalap [hapa-m malauk]* (HD356)  
2SG spoil jacket-2SG good NMLZ.INS-2SG(B/C) fish.in.river  
‘You have ruined your beautiful jacket [that you wore while fishing].’
- c. *ia djari manjewa arut-ku idjä hai,* (HG156)  
3SG already rent boat-1SG NMLZ big  
*[hapa-e barajar akan Sampit]*  
NMLZ.INS-3(B/C) sail for/to PLN  
‘He rented my big boat [and used it to go (lit. with which he sailed) to Sampit].’

In Ngaju, there are several temporal adverbial subordinators, that is, *katika*, *metoh*, *pesa(n)* ‘when/while’ and *katahi(n)* ‘while, as long as, since’. Among them, only *pesa(n)* and *katahi(n)* usually take pronominal suffixes.<sup>8</sup>

[Hardeland \(1859:433\)](#) includes *pesa* ‘the moment (that); as long as’ as a main entry, and does not cite the form *pesan* as an entry (but see “*Pesan*” in [Hardeland’s \(1858:157\)](#) list of conjunctions). However, leaving the ‘citation form issue’ open again, this paper considers that *pesa(n)* shows the **Pattern B/C** in the same way as *hapa(n)* above.

- (15) a. *[pеса-ngku tabela] baperes wäi aku* (HD433)  
when-1SG(B/C) young sickly just 1SG  
‘[When I was young], I often got sick.’
- b. *[pеса-m tabela] babintar mata-ngku mahaga ikau* (HD22)  
when-2SG(B/C) young tired eye-1SG maintain 2SG  
‘[When you were young], my eyes got tired of looking after you.’
- c. *iä tä njanjau bara [pеса-e tabela]* (HD386)  
3 DEF unwise from when-3(B/C) young  
‘He has become more silly than [when he was still young].’

Another temporal subordinator *katahi(n)* also raises ‘citation form issue’ in the same way as *hapa(n)* and *pesa(n)* (HG156 presents “*Katahin*” as one of the “Conjunctionen”, while HD547 puts “*Katahi*” as a derived sub-entry under the main entry “TAHI”). However, this paper leaves it open again and considers that *katahi(n)* reveals the **Pattern B/C**. As

<sup>8</sup> No example of ‘*katika* + pronominal suffix’ has yet been found, and only two examples of ‘*metoh* + 1SG pronominal suffix’: *iä mahaga aku [metoh-ku tabela]* ‘**When I** was young, he took care of me.’ (HD364); *ramongku inakau olo [metoh-ku nihau halisang]* ‘My goods were stolen **while I** was away on a journey.’ (HG172).



shown in (16), the subordinate clause headed by *katahi(n)* can function as an adjunct, more specifically, a temporal adverbial clause in a sentence.<sup>9</sup>

- (16) a. [*katahi-ngku bäbes*], *mangat rasa-ngku* (HD468)  
 while-1SG(B/C) sweat pleasant feeling-1SG  
 ‘[As long as I sweat], I feel good.’
- b. [*katahi-e halisang*] *labih sapulu tapakah-e djari* (HD574)  
 while-3(B/C) go.on.journey more ten gift-3 already  
*sampai sawa-e*  
 until/to wife-3  
 ‘[Since he has been traveling], he has already sent more than 10 kipings (=20 guilders) to his wife.’
- c. *aku djari manjang iä* [*katahi-e haban*] (HD547)  
 1SG already serve 3SG while-3(B/C) sick  
 ‘I nursed him [while he was sick].’

In the same way as *äka-e* ‘place-3’ noted in (12), *katahi-e* may have non-conjunction reading. In (16b) or (16c), the suffix *-e* functions as the subject ‘he’, while in (17) below, it is the 2SG pronoun ‘you’ after *katahi-e* that functions as the subject. The pronominal suffix *-e* in (17) refers to the event expressed by the following clause ‘you get there’.

- (17) *pirä katahi-e* [*ikau kantä*]? (HD438)  
 how.much duration-3(B/C) 2SG there (=akan+tä=for/to+DEF)  
 ‘How long does it take you to get there?’

On the other hand, the subordinate clause headed by *katahi(n)* can also function as an argument, more specifically, a complement clause in a sentence only when the main clause predicate expresses a degree or quantity of duration as ‘extreme’, ‘extraordinary’ or ‘a whole month’. In such cases, the subordinate clauses are not assigned temporal adverbial interpretations like [when I was waiting for his coming] ( $\neq$ 18a), [while you were away] ( $\neq$ 18b), nor [when he traveled to Banjarmasin] ( $\neq$ 18c).

- (18) a. *paham* [*katahi-ngku mahadang iä dumah*] (HD139)  
 extreme COMP-1SG(B/C) wait.for 3SG come  
 ‘Extremely long, [the length of time I have waited for his coming].’
- b. *lalehan* [*katahi-m djaton*], *haru-m mamarah tinai* (HD326)  
 extraordinary COMP-2SG(B/C) not just.now-2SG become.visible again  
 ‘Extraordinarily long, [the length of time you have not been (there)], and only now you show up again.’
- c. *manteng idjä bulan* [*katahi-e masauh*] (HD354)  
 full one month COMP-3(B/C) travel.to.Banjarmasin(downstream)  
 ‘A whole month, [the length of time he traveled to Banjarmasin].’

<sup>9</sup> No example of 2SG subject suffix (*katahi-m*) has yet been found. Only one example of free pronoun subject (*katahin iä...* (3SG), HG156) has been found.

A locative noun *huang* ‘in(side), heart’ is not described as a conjunction by [Hardeland \(1858\)](#), but it can actually function as the head of a complement clause which expresses ‘desire’ or ‘intention’. In its complementizer use, *huang* takes pronominal suffixes showing the **Pattern A**, but it cannot be followed by a free pronoun.

- (19) a. *aku mina [huang-ku handak mamukul iä]* (HD189)  
 1SG keep COMP-1SG(A) want hit 3SG  
 ‘I have [an intention to beat him up].’
- b. *aton [huang-m ikau akan Kahaian]* (HD182)  
 there.is COMP-2SG(A) 2SG[SBJ] for/to PLN  
 ‘Do you have [a desire to travel to Kahaian]?’
- c. *iä djaton tarabalang, busong [huang-e omba]* (HD82)  
 3SG not can.give.up strong COMP-3(A) go.along  
 ‘He cannot help himself, [his desire to go along] is strong.’

The example (19b) shows a rare case where a pronominal subject suffix (-*m*) is redundantly followed by the same person-number full subject form (*ikau*). The non-overt feature ‘SBJ’ in (19b) is glossed with ‘[ ]’ adopting [Corbett’s \(2006\)](#) convention.

**Table 4** provides an overview of the Ngaju conjunctions and their postposed pronominal forms.

**Table 4. Conjunctions and their postposed pronominal forms in Ngaju**

Ngaju	gloss	pattern	<i>n</i> -deletion	linker	+ suffix	+ full form
<i>awi</i>	‘because (of)’	<b>A’</b>	NO	NO	✓	(✓)
<i>äka</i>	NMLZ.LOC	<b>A’</b>	NO	NO	✓	—
<i>idjä</i>	NMLZ		NO	NO	—	(✓)
<i>awang</i>	NMLZ		NO	NO	—	(✓)
<i>hapa(n)</i>	NMLZ.INS	<b>B/C</b>	YES-NO   NO-YES	NO-YES	✓	—
<i>pesa(n)</i>	‘when’	<b>B/C</b>	YES-NO   NO-YES	NO-YES	✓	—
<i>katahi(n)</i>	‘while’/COMP	<b>B/C</b>	YES-NO   NO-YES	NO-YES	✓	(✓)
<i>huang</i>	COMP (desire)	<b>A</b>	NO	NO	✓	—

#### 2.1.4 When attached to adverbs/auxiliaries (Ngaju)

Pronominal suffixes can also be attached to adverbs or auxiliaries, functioning as the subject of a clause. [Hardeland \(1858\)](#) did not provide a description of ‘adverb/auxiliary + pronominal suffix’, but he only mentioned the possibility of suffixing to *ahat* and *ihat* (see below) by seeing them as conjunctions. In the following, a modality adverb/auxiliary *ahat/ihat* and an aspect adverb/auxiliary *haru(n)* are illustrated.

The form *ihat* is only cited with a reference “i. q. ahat” (idem quod *ahat*) ([Hardeland 1859:187](#)), possibly designating as an alternative form of *ahat*. This alternative form *ihat* is more frequently used than the main entry form *ahat*,<sup>10</sup> and is presumably a contracted

<sup>10</sup> It can be assumed that the main entry form *ahat* ‘intention(ally)’ is not frequently used in order to avoid a homonymic clash with (*andau*) *ahat* ‘Sunday’.

form of *tantai ahat* ‘intentionally’ which consists of an adverb *tantai* ‘intentionally’ and *ahat* ‘intention(ally), pretending’. This adverb/auxiliary *ahat/ihat* takes pronominal subject suffixes revealing the **Pattern A**, but it is not normally followed by a subject free pronoun. The construction ‘*ahat/ihat* + pronominal subject suffix’ usually involves the particle (*be*)*wäi* ‘just’ after the predicate as shown in (20) below.

- (20) a. *ihat-ku*                      *dia bewäi omba*    *ia*                      (HD93)  
intentionally-1SG(A) not just go.along 3SG  
‘I just do not (want to) go with him.’
- b. *ihat-m*                      *mandarem arep-m*    *wäi awi*            *kadia-m*    (HD90)  
intentionally-2SG(A) cause.fever self-2SG just because lazy-2SG  
‘You deliberately pretend to have a fever because of your laziness.’
- c. *ia*    *bisi, ahat-e*                      *mamapa*            *arep-e wäi*                      (HD69)  
3SG rich intentionally-3(A) spoil/sadden self-3 just  
‘He is rich, he just calls himself poor on purpose.’

In (20a), *ihat* indicates that the judgement ‘no’ on the event ‘I go with him’ is intentional. Similarly, *ihat* in (20b) indicates the event ‘you have a fever’ is intentional or pretending, and *ahat* in (20c) indicates ‘he calls himself poor’ is intentional or pretending.

Another adverb/auxiliary *haru(n)* ‘just now’ also raises ‘citation form issue’. This paper assumes that *harun* consists of the base *haru* and the linker *-n* (HD167 includes *haru* as the entry form, and considers *harun* as its alternative form). It is suggested that *haru* and *harun* are in free variation as illustrated in (21), but it is usually the form *haru* (21a, without the linker) that is preposed to a free subject pronoun<sup>11</sup> and (21b) is the only example of ‘*harun* + a free subject pronoun’ in HD/HG.

- (21) a. *haru*    *ita*                      *h-itä*                      *bau*                      (HD195)  
just.now 1PL.INCL RECP-seen face  
‘Only now we see each other face-to-face.’
- b. *haru-n*                      *ita*                      *ha-sembang tandok andau etoh*                      (HD168)  
just.now-LK(C) 1PL.INCL RECP-meet horn day here  
‘Only now our eyes (<horns) meet each other today.’

The adverb/auxiliary *haru* takes pronominal subject suffixes, revealing the **Pattern C** (see also *haru-m* in (18b)). In (22a), *haru* indicates that the event ‘I return from a trip’ has just happened at the time of the utterance. Similarly, *haru* indicates that the event ‘you come to me’ in (22b) and ‘he can make a few sounds’ in (22c) have just happened at the time of each utterance.

<sup>11</sup> There are a few examples of ‘*haru* + a free subject pronoun’: *haru aku misä duit* ‘I have just counted the money.’ (HD463); *haru ia misik batiroh* ‘He has just awaked from a sleep.’ (HD467, see also (10d)); *haru äwen hakotak, tinai barabenjep ia batiroh* ‘Just a moment ago they had a talk, he has suddenly fallen asleep now.’ (HD44). Particularly with regard to the 3SG subject, *haru-e* ‘just now (s)he’ and *haru ia* ‘just now (s)he’ are found with equal frequency.

- (22) a. *haru-ngku karamahan namuäi* (HD234)  
just.now-1SG(C) come be.on.journey  
'I have just returned from my trip.'
- b. *haru-m manjembang biti-ngku* (HD351)  
just.now-2SG(C) come.to.someone body-1SG  
'Only now you come to me.'
- c. *korik awau-e, haru-e tau nabuan* (HD542)  
small infant-3 just.now-3(C) can start.making.sounds  
'Her child is small, he can only make a few sounds now.'

In the case of this aspect adverb/auxiliary *haru*, the same person-number full subject may redundantly occur with a pronominal suffix (as seen in the case of complementizer *huang-m* in (19b)). The examples in (23) demonstrate the construction 'subject + *haru* + (the same person-number) pronominal subject suffix', in which the subject is a free pronoun (=23a) or a full noun phrase (=23b) (Non-overt features are indicated in '[ ]').

- (23) a. *aku haru-ngku mimbul,* (HD291)  
**1SG[SBJ]** just.now-1SG(C) plant  
*malambang para tana-ngku*  
plant.with.rows butt field-1SG  
'I have just started planting, planted a few rows (only) at the back of my field.'
- b. *awau haru-e tau manandjong ngaliwit dinding* (HD378)  
**infant[3.SBJ]** just.now-3(C) can walk toward wall  
'The child has just become able to walk along the wall (holding on to it).'

**Table 5** provides an overview of the Ngaju adverbs/auxiliaries and their postposed pronominal forms.

**Table 5. Adverbs/auxiliaries and their postposed pronominal forms in Ngaju**

Ngaju	gloss	pattern	<i>n</i> -deletion	linker	+ suffix	+ full form
<i>ahat/ihat</i>	'intention(ally)'	<b>A</b>	NO	NO	✓	—
<i>haru</i>	'just now'	<b>C</b>	NO	YES	✓	✓

In sum, pronominal suffixes in Ngaju function broadly as possessors in a noun phrase, and to a limited extent as objects/governees in a prepositional phrase or as subjects in a clause. In addition, pronominal subject suffixes can (only occasionally) be used as non-referential agreement markers targeting the complementizer *huang* and the adverb/auxiliary *haru* (see (19b) and (23)). The linker *-n* in **Pattern C** is not any kind of pronominal marker in that it obligatorily occurs only in order for free plural pronouns to follow a possessee, preposition, conjunction, or adverb/auxiliary.

## 2.2 Pronominal suffixes in Dohoi

As already shown in **Table 1**, pronominal suffixes and their full forms in Dohoi are slightly different from the ones in Ngaju. The Dohoi linker morpheme *-n* is the same form as the one in Ngaju.

### 2.2.1 When attached to possessives (Dohoi)

Possessives can be followed by a free ‘absolute’ possessive form in Dohoi (e.g., *endo* ‘their’, *eku* ‘my’), but they are usually followed by a bound pronominal possessor form (e.g., *=(n)do* ‘their’, *=ku* ‘my’).

Bases ending in a diphthong<sup>12</sup> or a consonant other than *n* can be followed by a pronominal enclitic without any other additional processes (bare type). Notice that they cannot be followed by a pronominal suffix *-k(ku)*, *-m*, or *-i/-u*.

(24) *alut* ‘boat’

- a. *alut=kai* ‘our(EXCL) boat’, *alut=mi* ‘your(PL) boat’, *alut=ndo* ‘their boat’
- b. *alut=ku* ‘my boat’
- c. *alut=mu* ‘your(SG) boat’, *alut=ah* ‘his/her/their boat’

Bases ending in *n* can be followed by (a) a plural pronominal enclitic without any other additional processes. They can also be followed by (b) the 1SG pronominal bound form *kku* or (c) the 2nd/3rd person pronominal suffix with the process of deleting the base-final *n*.

(25) *aran*<sup>13</sup> ‘name’

- a. *aran=kai* ‘our(EXCL) name’, *aran=mi* ‘your(PL) name’, *aran=do* ‘their name’
- b. *arakku* ‘my name’
- c. *ara-m* ‘your(SG) name’, *ara-i* ‘his/her/their name’

Bases ending in a monophthong can be followed by (a) a plural pronominal enclitic with the additional process of suffixing the linker *-n* to the base. They can also be followed by (b) the 1SG pronominal bound form *kku* or (c) the 2nd/3rd person pronominal suffix without any other additional morphological processes.

(26) *umo* ‘rice field’

- a. *umo-n=kai* ‘our(EXCL) rice field’, *umo-n=do* ‘their rice field’
- b. *umokku* ‘my rice field’
- c. *umo-m* ‘your(SG) rice field’, *umo-i* ‘his/her/their rice field’

This paper posits the underlying form of the 1SG pronominal bound form in Dohoi to be *kku*. The allomorph *ku* occurs immediately after a diphthong or a base-final non-*n* consonant with the underlying velar consonant *k* of *kku* being deleted. Another allomorph *kku* occurs elsewhere.

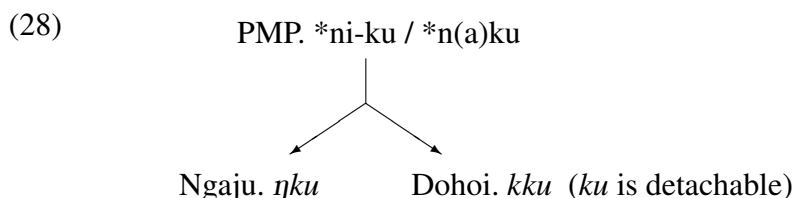
- |         |                |                  |                                   |                 |
|---------|----------------|------------------|-----------------------------------|-----------------|
| (27) a. | <i>alut=ku</i> | (boat-1SG)       | (clitic-initial <i>k</i> deleted) | ‘my boat’       |
| b.      | <i>ara-kku</i> | (name-1SG)       | (base-final <i>n</i> deleted)     | ‘my name’       |
| c.      | <i>umo-kku</i> | (rice.field-1SG) |                                   | ‘my rice field’ |

<sup>12</sup> For example, a base ending in a diphthong *paroi* ‘rice plant’ shows (a) *paroi=ndo* ‘their rice plant’, (b/c) *paroi=ku/=mu/=ah* ‘my/your(SG)/his.her.their rice plant’.

<sup>13</sup> The cognate form in Ngaju is *ara* ‘der Name’ (HD14; *arangku* ‘my name’, *aram* ‘your(SG) name’, *arae* ‘his/her/its/their name’).

As already shown in **Table 1**, Dohoi has the 1SG pronominal suffix which is realized as *-k* or *-kku*.<sup>14</sup> The latter form involves exactly the same string as the enclitic *=ku*, and in fact, this string *ku* may be detached from the preceding part and phonologically be reattached to the following word. When a demonstrative enclitic, for example, *=rih* ‘AN’ occurs immediately after *ku* or *kku* in (27), a well-formed phonological word *ku+rih* can appear through the reattachment process: (a) *alut kurih* (boat 1SG.AN) ‘that boat of mine’; (b) *arak kurih* (name 1SG.AN) ‘that name of mine’; (c) *umok kurih* (rice.field 1SG.AN) ‘that rice field of mine’. This means that the original head-marking 1SG bound form has been reanalyzed as detachable, a kind of “detached-marking”<sup>15</sup> bound form.

Diachronically, both of the 1SG bound pronominal forms in Ngaju and Dohoi have developed from Proto Malayo-Polynesian (PMP) 1SG genitive pronoun *\*ni-ku* (Blust 1977:5, 10–11) or *\*n(a)ku* (Ross 2006:542; Lobel 2013:118), with morpho-phonological reductions of the initial part to *ŋ* in Ngaju and to *k* in Dohoi.<sup>16</sup> These changes can be schematized as shown in (28).



The 3SG suffix *-i* has a phonologically conditioned allomorph *-u* which occurs immediately after a front vowel in order to avoid front vowel doubling (*\*i-i* in (29b), and *\*e-i* in (30b) where *n*-deletion process is needed).

- (29) *gawi* ‘work’
- a. *gawi-kku* ‘my work’
  - b. *gawi-m* ‘your(SG) work’, *gawi-u* ‘his/her/their work’ (*\*gawi-i*)

- (30) *elen* ‘not want’
- a. *ele-kku* ‘I do not want’
  - b. *ele-m* ‘you do not want’, *ele-u* ‘(s)he does not want’ (*\*ele-i*)

As is the case in Ngaju, there are also a few monophthong-final ‘exceptional bare type’ bases in Dohoi, which take pronominal enclitics (not suffixes unlike Ngaju) in the same way as bare type (**Pattern A**) bases.

<sup>14</sup> As shown in (32a), (44a), and (47a) below, *-kku* may be reduced to *-k* without changing its meaning.

<sup>15</sup> For morphological “detached-marking”, see Bickel & Nichols (2007) and Nichols & Lander (2020).

<sup>16</sup> The protoform *\*ni-ku*, which consists of a genitive marker *\*ni* and 1SG *\*ku*, underwent “the syncope of the unstressed vowel (=i)” (Blust 1977:5). This phonological change would result in Ngaju *ŋku* after nasal place assimilation to *k*. However, the Dohoi form *kku* cannot be derived by phonological changes alone. Even if the nasal part of *\*n()ku* were exempted from another change of *\*NT > T* (N=nasal consonants, T=voiceless plosives) (see Hudson (1967:52–53), Inagaki (2007:118–119)), it is difficult to justify the complete assimilation of the nasal part to *k* in the synchronic/diachronic phonology of Dohoi, as one of the anonymous referees correctly pointed out.

- (31) Examples of ‘exceptional bare type’ bases in Dohoi:
- a. kinship terms (excluding *pahari* ‘brother, sister, relative’ and *osu* ‘grandchild’)
    - i. *mama=ku/=mu/=ah* ‘uncle of 1SG/2SG/3’ (\**mama-k(ku)/-m/-i/-n*)
    - ii. *oka=ku/=mu/=ah* ‘older sibling of 1SG/2SG/3’ (\**oka-k(ku)/-m/-i/-n*)
    - iii. *tahtu=ku/=mu/=ah* ‘grandparents of 1SG/2SG/3’ (\**tahtu-k(ku)/-m/-i/-n*)
  - b. *pahku=ku/=mu/=ah* ‘nail of 1SG/2SG/3’ (\**pahku-k(ku)/-m/-i/-n*)

Each pattern of pronominal possessive suffixation in Dohoi is summarized in **Table 6**. The **Pattern A’** is phonologically exceptional, while the **Pattern C’** is lexically exceptional.

**Table 6. Each pattern of pronominal possessive suffixation/cliticization in Dohoi**

Dohoi	gloss	pattern	<i>n</i> -deletion	linker	details
<i>alut</i>	‘boat’	<b>A</b>	NO	NO	base ends in C( $\neq n$ )
<i>paroi</i>	‘rice plant’	<b>A</b>	NO	NO	ends in diphthong
<i>aran</i>	‘name’	<b>B</b>	YES	NO	ends in <i>n</i>
<i>umo</i>	‘rice field’	<b>C</b>	NO	YES	ends in V
<i>mama</i>	‘uncle’	<b>A’</b>	NO	NO	ends in V, kinship term
<i>osu</i>	‘grandchild’	<b>C’</b>	NO	YES	ends in V, kinship term
<i>pahku</i>	‘nail’	<b>A’</b>	NO	NO	ends in V

### 2.2.2 When attached to prepositions/conjunctions (Dohoi)

Pronominal suffixes may function as the ‘object’ or governee of prepositions. (32) shows *n*-final prepositions in **Pattern B**.

- (32)
- |  |  |
|--|--|
| <i>ahkan</i> ‘for (BEN)’               | <i>kobain</i> ‘because of’                 |
| a. <i>ahka-k(ku)</i> ‘for me’          | <i>kobai-k(ku)</i> ‘because of me’         |
| b. <i>ahka-m</i> ‘for you(SG)’         | <i>kobai-m</i> ‘because of you(SG)’        |
| c. <i>ahka-i</i> ‘for him/her/it/them’ | <i>kobaiu</i> ‘because (=SRD conjunction)’ |

The singular ‘objects’ or governees of these prepositions are usually neither full pronouns nor enclitics (e.g., \**ahkan ahku/ihko/io*; \**ahkan=ku/=ko/=mu/=ah*). On the other hand, plural full pronouns *ihkai/ihto/ihkam/iroh* and enclitics *=kai/=to/=kam/=ndo* (1PL.EXCL/1PL.INCL/2PL/3PL) can be the objects/governees of these prepositions.

Another *n*-final preposition *tahkan* ‘from (ABL)’ does not require either *n*-deletion or the linker *-n*. It cannot take any bound pronominals.

- (33) *tahkan* ‘from (ABL)’
- |                                      |                         |                         |
|--------------------------------------|-------------------------|-------------------------|
| a. <i>tahkan ahku</i> ‘from me’      | (* <i>tahka-k(ku)</i> , | * <i>tahkan=ku</i> )    |
| b. <i>tahkan ihko</i> ‘from you(SG)’ | (* <i>tahka-m</i> ,     | * <i>tahkan=mu/ko</i> ) |
| c. <i>tahkan io</i> ‘from him/her’   | (* <i>tahka-i</i> ,     | * <i>tahkan=ah</i> )    |

A V-final preposition *umba* ‘with (COM/DAT)’ is the exceptional bare type which reveals the **Pattern A’**. It cannot take pronominal suffixes, but does not resist hosting pronominal enclitics (e.g., *umba=ah* ‘with him/her/it/them’).

- (34) *umba* ‘with (COM/DAT)’
- umba ahku* ‘with me’ (\**umba-k(ku)*)
  - umba ihko* ‘with you (SG)’ (\**umba-m*)
  - umba io* ‘with him/her’ (\**umba-i*)

As seen in 2.1.3, the Ngaju prepositions can be used as conjunctions, and the same can be said for the Dohoi prepositions. The prepositions shown in (32) above can function as adverbial subordinators to which pronominal subject suffixes are attached. One of such subordinators *ahkan* ‘in order to, so that (PURP)’ is possibly regarded as a conjunction that has been more strongly grammaticalized from the original benefactive preposition.<sup>17</sup> In the following examples, each subordinate clause is bracketed with [ ].

- (35) a. [(*ah*)*ka-k*                    *tahtou sanang=ndai*]  
 in.order.to-1SG(B) wealthy happy=PFV  
 ‘[in order for me to be completely rich/happy]’ (Inagaki 2013a:52)
- b. [*ahka-m*                    *ngoruh ihkai jahawen=tuh*]  
 in.order.to-2SG(B) take.a.wife 1PL.EXCL six=DEM  
 ‘[in order for you to take the six of us for your wives]’ (Inagaki 2013b:101)
- c. [*ahka-i*                    *tou bolum hino*]  
 in.order.to-3(B) can live again  
 ‘[so that it (=my engine) runs again]’ (Inagaki 2015:16)

The preposition/conjunction *kobain* can take 1SG and 2SG pronominal subject suffixes, but not the 3rd person pronominal subject suffix *-i/-u*. In fact, the suffixed form *kobaiu* is found, but it has become a subordinator meaning ‘because’, and no longer contains the 3rd person subject. In (36c), it is the 1SG pronoun *ahku* ‘I’ that functions as the subject of the following predicate.

- (36) a. [*kobai-k*                    *ngorih susu*]  
 because-1SG(B) drink milk  
 ‘[because I drank milk]’ (Inagaki 2013a:52)
- b. [*kobai-m*                    *membina bandung mu=rih*]  
 because-2SG(B) foster the.other.woman 2SG=AN  
 ‘[because you took care of your mistresses in question]’ (folklore)
- c. [*kobaiu ahku nohto ihco bahtang kahat*]  
 because 1SG see one CLF betel  
 ‘[because I saw a betel tree]’ (story)

Another *n*-final (coordinating) conjunction *kalawun/kawun* ‘then’, as expected, reveals **Pattern B**. Note that transitive verbs can take anaphoric 3rd person object bound forms

<sup>17</sup> Kuteva et al. (2019:74–75) gives some cases of grammaticalization from benefactive adposition into “purpose marker”: Yaqui postposition *bečibo* (“*hume usim bečibo* ‘for the children’ [BEN]”) is also used as a subordinator (“*hume usim hi?ine bečibo* ‘for the children to drink’ [PURP]”); Rapanui preposition *mo* (“*mo korua* ‘for you’ [BEN]”) is also used as a subordinator (“*mo ma’u kiruga ki te miro* ‘in order to carry [the cattle] onto the boat’ [PURP]”).



*-i/-u/=ah/=oh* as shown in (37a: *ngasai=ah* ‘smear it’; cf. *ngasai* ‘smear’) and (37c: *nooi* ‘set it up’; cf. *noon* ‘set up’).

- (37) a. *ka(la)wu-kku ngasai=ah aang butui=ku*  
 then-1SG[SBJ](B) smear=3[OBJ] at/in/on belly=1SG  
 ‘Then I applied it (=cajeput oil) to my belly.’ (story)
- b. *ihko monyun, kalawu-m ngorih danum kuhpi*  
 2SG get.up then-2SG(B) drink water coffee  
 ‘You got up, then you drank a cup of coffee.’ (elicited)
- c. *kalawu-i noo-i hino aang taruk kacu*  
 then-3[SBJ](B) set.up-3[OBJ] again at/in/on upper wood  
 ‘Then he set it (=fish trap) up again on a tree.’ (Inagaki 2013b:104)

Among singular pronominals, only suffixes can be attached to *kalawun/kawun*. Therefore, both *\*ka(la)wun=ku/=mu/=ah* and *\*ka(la)wun ahku/ihko/io* would be ungrammatical.

A V-final nominalizer (*i)jo* cannot take either pronominal suffixes or the linker *-n*. On the other hand, [(*i)jo* + full/enclitic pronominal form] may make some sense only when the prepositional nominalized clauses [(*i)jo* + PP ...] can exhibit an alternative word order as in (38). However, [(*i)jo* + full/enclitic pronominal form] is usually regarded as structurally awkward (unlike the Ngaju constructions in (13)), thus the judgement ‘%’ (awkward) is given in (38).

- (38) a. % *inon kolou ulun orih, [ijo (ah)ku jadi nonga ubat ahka-i]?*  
 how human AN NMLZ 1SG PRF give medicine for-3  
 ‘How is the person [to whom I gave a medicine] doing?’  
 (alternative word order of [*ijo ahkai ahku nonga ubat*]) (elicited)
- b. % *ulun ata jaat umba ihko, [ijo (ih)ko sita umba=ah]*  
 human always bad with 2SG NMLZ 2SG love with=3  
 ‘People [to whom you show a friendly attitude] are always rude to you.’  
 (alternative word order of [*ijo umba=ah ihko sita*]) (elicited)

Another V-final subordinator *olu* cannot take pronominal suffixes but can host pronominal enclitics. Thus, it reveals **Pattern A’**. Full pronouns can also be postposed to *olu*.

- (39) *olu* ‘although’
- a. *olu=ku / olu ahku* ‘although I’ (\**olu-k(ku)*)
- b. *olu=ko / olu=mu / olu ihko* ‘although you (SG)’ (\**olu-m*)
- c. *olu=ah / olu io* ‘although (s)he/it’ (\**olu-i*)
- d. [*olu ahku nuhkan*], (Inagaki 2015:17)  
 although 1SG make.hole ‘Although I make holes (to plant),’

A conjunction *katahi* ‘when/while’ in Dohoi is almost the same temporal subordinator as *katahi(n)* in Ngaju (see (16)), but it may be realized as *kotahi* due to the free variation *a~o* of the prefix *kV-* (*ka-~ko-*). The Dohoi prefix *kV-* is used to derive abstract nouns such as *ka-hajo* ‘size’, *ka-tuu* ‘truth’, or *ko-henda* ‘yellowness’ (from *hajo* ‘big’, *tuu* ‘true’, and *henda* ‘turmeric’). Similarly, *ka-tahi* ‘duration’ (from *tahi* ‘long time’) is originally an

abstract noun, which can take pronominal suffixes (but cannot host pronominal enclitics) and reveals **Pattern C**.<sup>18</sup>

- (40) a. *tihkas tolu=ih, ... [katahi-kku mohcon, dahtah Pulang turih]* (story)  
 until three=just while-1SG(C) stay plain PLN DEM.AN  
 ‘At most three people (who came to me) [when I stayed, (at) that Pulang Plain].’
- b. [*katahi-m mohcon aang hotel malom*], *Widi nyolong sokula*  
 while-2SG(C) stay at/in/on hotel yesterday PSN go.inside school  
 ‘[When you were staying at a hotel yesterday], Widi was in school.’ (elicited)
- c. *amai Busun haru-i mokomo=ah [katahi-u pahkat ihko]*  
 father.PSN[3SBJ] just.now-3 feel=3[OBJ] while-3(C) get.intimate 2SG  
 ‘Busun’s father finally got a feeling for it (=your personality) (elicited)  
 [when he got intimate with you].’

In the same way as in the case of *katahi(n)* in Ngaju, the 3rd person pronominal suffix *-u* of *katahi-u* in Dohoi does not necessarily function as the subject (cf. (40c)).

- (41) *eam pira-pira katahi-u, ondou pindong*  
 NEG how.much-how.much duration-3(C) day dark  
 ‘It was not long before it got dark.’ (Inagaki 2008:103, 147)

As is the case in Ngaju (18), the subordinate clause headed by *katahi* in Dohoi can also function as an argument, namely a complement clause in a sentence. This type of complement clause is based on the ‘excess’ construction built on the pattern ‘deadjectival *kV*-noun + bound pronominal’.<sup>19</sup> The following *katahi* clauses do not have temporal adverbial meanings like [when I was waiting for his coming] (≠42a), [while you were away] (≠42b), nor [when he went to Palangkaraya] (≠42c).

- (42) a. *dalou [katahi-kku ngindoi io lombut]*  
 excessively COMP-1SG(C) wait.for 3SG come  
 ‘Very long, [the length of time I have waited for his coming].’ (elicited)
- b. *tapa-dalou [katahi-m nyaro]*  
 SUPER-excessively COMP-2SG(C) not.exist  
 ‘Excessively long, [the length of time you have not been (there)].’ (elicited)
- c. *ihco bulan [katahi-u nohus nokuh Palangka]*  
 one month COMP-3(C) go.downstream toward PLN  
 ‘One month, [the length of time he went to Palangkaraya].’ (elicited)

A locative noun *unuk* ‘place’ may function as locative nominalizer in the same way as *äka* ‘place’ in Ngaju. This C-final conjunction can host pronominal enclitics, revealing **Pat-**

<sup>18</sup> Couderc (pers. comm.) pointed out that *uhun* ‘when’ in the West dialect of Dohoi spoken mainly in West Kalimantan reveals **Pattern B**: *uhu-k/-m/-i* ‘when I/you/(s)he/it ...’. This temporal subordinator is infrequent in the Kadorih dialect spoken in Central Kalimantan.

<sup>19</sup> An example of the ‘excess’ construction in Dohoi is as follows: *dalou k-uong mu=tuh* [excessively *kV*-stupid 2SG=DEM] ‘It is excessively stupid for you’ (Inagaki 2008:64).

**tern A.** The nominalized clauses in (43) are all in modification-use restricting (a) *haran*, (b) *lowu*, and (c) *kahcang*.

- (43) a. *ahku napa haran [unuk=ku ngihang uoi]*  
 1SG make drying.terrace NMLZ.LOC=1SG(A) dry rattan  
 ‘I make a drying terrace [on which I dry rattan].’ (elicited)
- b. *lowu [unuk=mu mohcon] aang amoh?*  
 village NMLZ.LOC=2SG(A) live at/in/on where  
 ‘Where is the village [where you (=unfamiliar) live].’ (elicited)
- c. *kahcang [unuk=ah tiruh] tilap uju hanya*  
 plaited.mat NMLZ.LOC=3(A) sleep piled seven eight  
 ‘The plaited mats [on which he sleeps] are piled up 7 or 8 high.’ (elicited)

**Table 7** provides an overview of the Dohoi prepositions/conjunctions and their postposed pronominal forms.

**Table 7. Prepositions/conjunctions and their postposed pronominal forms in Dohoi**

Dohoi	gloss	pattern	<i>n</i> -deletion	linker	+ suffix	+ enclitic	+ full form
<i>ahkan</i>	‘for’	<b>B</b>	YES	NO	✓	—	—
<i>kobain</i>	‘because (of)’	<b>B</b>	YES	NO	✓	—	—
<i>tahkan</i>	‘from’		NO	NO	—	—	✓
<i>umba</i>	‘with’	<b>A’</b>	NO	NO	—	✓	✓
<i>ka(la)wun</i>	‘then’	<b>B</b>	YES	NO	✓	—	—
<i>(i)jo</i>	NMLZ		NO	NO	—	%	%
<i>olu</i>	‘although’	<b>A’</b>	NO	NO	—	✓	✓
<i>katahi</i>	‘while’/COMP	<b>C</b>	NO	YES	✓	—	—
<i>unuk</i>	NMLZ.LOC	<b>A</b>	NO	NO	—	✓	—

### 2.2.3 When attached to adverbs/auxiliaries (Dohoi)

Some adverbs/auxiliaries in Dohoi can take bound pronominals (suffixes/enclitics), and moreover the same person-number full subject may redundantly co-occur with the bound pronominal in the same clause. An auxiliary *harun* ‘just now’, the cognate form of Ngaju *haru(n)*, reveals **Pattern B**. It does not raise ‘citation form issue’ since in Dohoi only the generalized form *harun* (which undergoes *n*-deletion) has been attested. Diachronically, however, it has possibly been generalized from *haru-n* ‘just.now-LK’.

- (44) a. *haru-k(ku) mingat ah=ka*  
 just.now-1SG(B) recall 3[OBJ]=also  
 ‘I have just remembered it.’ (Inagaki 2008:187)
- b. *haru-m lombut=hom*  
 just.now-2SG(B) come=here.now.visible  
 ‘You arrived now (I am seeing you).’ (Inagaki 2013b:118)
- c. *haru-i tukun ihco talaga*  
 just.now-3(B) arrive one pond  
 ‘He has just arrived at a pond.’ (folklore)

The examples in (45) below illustrate cases where the same person-number full subjects co-occur within the same clause.

- (45) a. *ahku haru-k(ku) soleng=ah*  
 1SG[SBJ] just.now-1SG(B) understand=3[OBJ]  
 ‘I have just understood it.’ (Inagaki 2013a:51)
- b. *ihko haru-m sokula*  
 2SG[SBJ] just.now-2SG(B) school  
 ‘You have just started going to school.’ (elicited)
- c. *io haru-i lombut tahkan Jahpang=nai*  
 3SG[SBJ] just.now-3(B) come from Japan=a.moment.ago  
 ‘He has just arrived from Japan.’ (Inagaki 2008:187)

As shown in (46) below, it is obvious that what is optional here is the presence of full subjects, not the presence of bound pronominals. Moreover, (singular) bound pronominals are necessary and obligatory for *harun* irrespective of whether or not a full subject phrase is present.

- (46) a. *haru-k(ku) soleng=ah* \**ahku harun soleng=ah*  
 ‘I have just understood it.’ (elicited)
- b. *haru-m sokula* \**ihko harun sokula*  
 ‘You have just started going to school.’ (elicited)
- c. *haru-i lombut tahkan Jahpang=nai* \**io harun lombut tahkan Jahpang=nai*  
 ‘He has just arrived from Japan.’ (elicited)

See also the example in which a subject noun phrase co-occurs with a bound pronominal, (40c) *amai Busun haru-i mokomo=ah* ‘Busun’s father finally got a feeling for it’.

Another modal auxiliary *duon* ‘can’, which reveals **Pattern B**, also shows the co-occurrence of (pronominal) morphemes which are indexed to the same referent. As is the case in (46) above, bound pronominals are obligatory. In (47b), because of a stylistic preference, the full pronoun *ihko* ‘you(SG)’ is dislocated out of the canonical subject position to the sentence-final position after a slight pause.

- (47) a. *ahku duo-k(ku) pokalah io*  
 1SG[SBJ] can-1SG(B) defeat 3SG  
 ‘I can defeat him.’ (Inagaki 2013a:50)
- b. *jadi duo-m moli balanga, ihko turih*  
 PRF can-2SG(B) buy earthenware.pot 2SG[SBJ] DEM.AN  
 ‘You can already buy an earthenware pot.’ (Inagaki 2008:181)
- c. *inaI Yoga ya=duo-i honong kuman sahang*  
 mother.PSN[3SBJ] NEG=can-3(B) IPFV eat red.pepper  
 ‘Yoga’s mother cannot eat red peppers for the time being.’ (Inagaki 2013a:50)

Similarly, *ya=taan* ‘cannot (<NEG=know)’ also shows the same kind of co-occurrence with obligatory bound pronominals, revealing **Pattern B**. For the difference between these ability auxiliaries (*ya=duon* and *ya=taan*, see Inagaki (2013b:115).

- (48) a. *ahku ya=taa-k napa=ah*  
 1SG[SBJ] NEG=know-1SG(B) make=3[OBJ]  
 ‘I cannot make it (=scabbard).’ (Inagaki 2008:182)
- b. *ihko ya=taa-m nuhkat ahka-k bua*  
 2SG[SBJ] NEG=know-2SG(B) climb for-1SG fruit  
 ‘You cannot climb (the tree) to get the fruit for me.’ (Inagaki 2013b:115)
- c. *kapahtung jatuh=nai baya puna ya=taa-i nahasong*  
 puppet[3SBJ] that.FOC=a.moment.ago only indeed NEG=know-3(B) breathe  
 ‘That (not the other) puppet just really cannot breathe.’ (Inagaki 2013b:115)

An *n*-final adverb *nain/noin* ‘later’ cannot take pronominal suffixes but can host pronominal enclitics (**Pattern A**). No examples of the co-occurrence mentioned above have been attested for *nain/noin*.

- (49) a. *nain=ku nokuh anan* (\**nai-k(ku)*, but *nain ahku* is OK)  
 later=1SG(A’) toward there  
 ‘Later, I will go there.’ (Inagaki 2014:77)
- b. *noin=ko ngomo=ah, palanduk* (\**noi-m*, but *noin ihko* is OK)  
 later=2SG(A’) feel=3, mouse.deer  
 ‘Later, you will feel (afraid), mouse deer.’ (story)
- c. *nain io tou maluhku* (\**nai-u*, \**nain=ah*)  
 later 3SG can smoke  
 ‘Later, he will be able to smoke.’ (story)

Another 2nd person singular enclitic =*mu* might be used in place of =*ko* in (49b), though =*mu* is rarely cliticized to *nain/noin*. What is peculiar to *nain/noin* is that while 1SG and 2SG enclitics can be attached to this adverb as in (49a) and (49b), the 3rd person enclitic =*ah* cannot, as in (49c). This kind of ‘enclitic selection’ can also be observed in the following V-final auxiliaries *puji* and *tou*, which reveal **Pattern A** (‘exceptional bare type’).

- (50) *puji* ‘have ever ...ed (EXP)’<sup>20</sup>
- a. *puji=ku* ‘I have ever’ (\**puji-k(ku)*, but *puji ahku* is OK)
- b. *puji=ko* ‘you (SG) have ever’
- c. *puji=mu* ‘you (SG) have ever’ (\**puji-m*, but *puji ihko* is OK)
- d. *puji io* ‘(s)he/it has ever’ (\**puji-u*, \**puji=ah*)
- e. *ya= puji=ku tiruh mahcam orih* (Inagaki 2013a:51)  
 NEG EXP=1SG sleep like AN  
 ‘I have never slept like that (= sitting on a tree in a jungle).’

<sup>20</sup> The cognate form in Ngaju is *pudji* ‘already’ (HD442). Old people of Dohoi often used another form *puu* ‘base, usual, EXP’ in negative sentences, for example, *eam puu keku nokuh Kohacan* ‘I have never been to Kahayan river/area’.

- (51) *tou* ‘can’
- tou=ku* ‘I can’ (\**tou-k(ku)*, but *tou ahku* is OK)
  - tou=ko* ‘you (SG) can’
  - tou=mu* ‘you (SG) can’ (\**tou-m*, but *tou ihko* is OK)
  - tou io* ‘(s)he/it can’ (\**tou-i*, \**tou=ah*)
  - tou=ku napa=ah* (story)  
can=1SG make=3[OBJ] ‘I can make it.’

On the other hand, an auxiliary/conjunction *beteng* ‘be ...ing (IPFV), when’, which reveals **Pattern A**, does not show the ‘enclitic selection’ (although IPFV-reading of the auxiliary usage is not expressed by ‘*beteng* + any full subject pronoun’ as shown in (52d)).

- (52) *beteng* ‘be ...ing (IPFV), when’
- beteng=ku* ‘I be ...ing’ or ‘when I ...’ (\**beteng-k(ku)*)
  - beteng=ko* ‘you (SG) be ...ing’ or ‘when you ...’
  - beteng=mu* ‘you (SG) be ...ing’ or ‘when you ...’ (\**beteng-m*)
  - beteng io* ‘when (s)he/it ...’ (not ‘(s)he/it/they be ...ing’)
  - beteng=ah* ‘(s)he/it/they be ...ing’ or ‘when (s)he/it/they ...’ (\**beteng-i*)
  - ahku beteng=ku bagawi* (Inagaki 2013b:107)  
1SG IPFV=1SG work ‘I was working.’

An auxiliary-like negative particle *eam* ‘not’ shows the co-occurrence of pronominal morphemes which are indexed to the same referent. What is obligatory here is the presence of bound pronominals, not the presence of full subjects.

- (53) a. *ahku eam=ku taa-i*  
1SG[SBJ] NEG=1SG(A) know-3[OBJ]  
‘I don’t know it.’ (Inagaki 2015:10)
- b. *ihko eam=mu deroh*  
2SG[SBJ] NEG=2SG(A) busy  
‘You are not busy.’ (elicited)
- c. *ukur io eam=ah tou baduruh*  
so.as.to 3SG[SBJ] NEG=3(A) can collapse  
‘so that it (=the pole of a working bench) won’t break’ (Inagaki 2013a:52)

One of the evidentiality indicators of sensory *kihtan* ‘vision’ take pronominal suffixes, revealing **Pattern B**.

- (54) a. *ulun atuh puna bokoporos=ah, kihta-kku*  
human that indeed be.painful=3 vision-1SG(B)  
‘That person was really suffering pain, I saw.’ (Inagaki 2013b:114)
- b. *ndoi kihta-m ahku nyaro=ndai gawi-kku*  
if vision-2SG(B) 1SG not.exist=PFV work-1SG  
‘If you see that I have nothing to work on,’ (story)

- c. *kihta-i ohcin naang aro*  
 vision-3(B) bird much  
 ‘He (=Uhko) saw that there were many birds.’ (Inagaki 2013b:118)

**Table 8** provides an overview of the Dohoi adverbs/auxiliaries and their postposed pronominal forms.

**Table 8. Adverbs/auxiliaries and their postposed pronominal forms in Dohoi**

Dohoi	gloss	pattern	<i>n</i> -deletion	linker	+ suffix	+ enclitic	+ full form
<i>harun</i>	‘just now’	<b>B</b>	YES	NO	✓	—	—
<i>duon</i>	‘can’	<b>B</b>	YES	NO	✓	—	—
<i>ya=taan</i>	‘cannot’	<b>B</b>	YES	NO	✓	—	—
<i>nain/noin</i>	‘later’	(A’)	NO	NO	—	✓(*= <i>ah</i> )	✓
<i>puji</i>	EXP	(A’)	NO	NO	—	✓(*= <i>ah</i> )	✓
<i>tou</i>	‘can’	(A’)	NO	NO	—	✓(*= <i>ah</i> )	✓
<i>beteng</i>	IPFV/‘when’	<b>A</b>	NO	NO	—	✓	✓
<i>eam</i>	NEG	<b>A</b>	NO	NO	—	✓	✓
<i>kihtan</i>	‘vision’	<b>B</b>	YES	NO	✓	—	—

As is the case in Ngaju, bound pronominals in Dohoi function broadly as possessors, and to a limited extent as objects/governees in a prepositional phrase or as subjects in a clause. Subject pronominals can be used as non-referential agreement markers mainly targeting adverbs/auxiliaries (2.2.3). Agreement phenomena will be discussed in more detail in the next section.

### 3. Agreement

§ 2.1.3 illustrates that a complementizer *huang* in Ngaju may show subject agreement within a clause. Such a subordinator agreement is generally less common than verb/adjective agreement (cf. Lehmann (1982:206) excludes conjunction agreement), but “[relative pronouns] are common agreement targets” (Corbett 2006:42), and “complementizer agreement” has received considerable attention (e.g., van Koppen 2017).

As seen in section 2, in both Ngaju and Dohoi, some subordinators and adverbs/auxiliaries show agreement involving a bound pronominal within the clause domain. In contrast, possessives/prepositions can never co-occur with their ‘controllers’ within the domain of noun/prepositional phrase in both languages. These facts suggest that bound pronominals in these West Barito languages can function (i) as agreement markers within clauses or (ii) as incorporated pronouns within phrases.

However, agreement controllers do not always occur within the domain of clause, rather they usually do not occur in spoken Ngaju or Dohoi. As noted in Inagaki (2013a:53), following Siewierska (2004), some bound pronominals in Dohoi can be called “ambiguous agreement markers” since they occur either with or without an overt controller. Siewierska’s (2004:126) tripartite typology of person agreement markers is as follows:

**syntactic agreement marker:** “it cannot occur without an overt controller in the same construction, as is the case with the English *-s*”

**ambiguous agreement marker:** “[it] occurs both in the presence of an overt controller in the same construction [...] and in the absence of such a controller”

**pronominal agreement marker:** “[it] cannot occur with an overt controller in the same construction”

Of course, some bound pronominals in Ngaju can also be characterized as “ambiguous agreement markers”.

In this section, it will be argued that bound pronominals attached to specific targets (some *n*- and vowel-final elements) in Dohoi are more canonical agreement markers than ones attached to other targets, which are nothing more than “ambiguous agreement markers”. In the following, some agreement phenomena in Dohoi are described on the basis of the elicited data.

### 3.1 Double-marking

Two bound pronominals which are indexed to the same referent may be attached to different targets within a clause. For example, the 1SG pronominal subject suffix is attached to both a conjunction *katahi* and an auxiliary *duon* as in (55a), the 2SG subject suffix to both *kobain* and *harun* as in (55b), and the 3rd person subject suffix to both *ahkan* and *ya=taan* as in (55c). Compare bound pronominals which only appear as “ambiguous” (or possibly “pronominal”) agreement markers, with *katahi* (40, 42), *kobain* (36a, 36b), *harun* (44–46), and *ahkan* (35).

- (55) a. [*katahi-k(ku)* *ya=duo-k(ku)* *kuman sahang*], *ihko* ... (elicited)  
 while-1SG NEG=can-1SG eat red.pepper 2SG  
 ‘[When I cannot eat red peppers], you ...’
- b. [*kobai-m (ihko) haru-m sokula*], *inai=mu* ...  
 because-2SG (2SG[SBJ]) just.now-2SG school mother=2SG  
 ‘[Because you have just started going to school], your mother ...’
- c. [*ahka-i ya=taa-i hokuwut*], *ahku* ...  
 in.order.to-3 NEG=know-3 move 1SG  
 ‘[In order for it (=wild pig) not to be able to move], I ...’

Notice that a full pronoun controller is potentially allowed to co-occur with the ‘agreeing’ conjunction as shown in (55b) above. On the other hand, a nominal controller (=3rd person) is not allowed to occur immediately after any ‘agreeing’ elements. Therefore, a nominal subject *bawui* ‘wild pig’ cannot be inserted after *ahkai* which agrees with the subject as in (56a) below. However, this 3rd person nominal subject may appear immediately after a ‘non-agreeing’ *ahkan* as in (56b), or after another ‘non-agreeing’ *ya=taan* as in (56c). These last two cases mirror the pattern of (*n*-final) non-agreeing preposition + governed nominal.

- (56) a. \* [*ahka-i bawui ya=taa-i hokuwut*], *ahku*... (elicited)  
 in.order.to-3 wild.pig[3SBJ] NEG=know-3 move 1SG
- b. [*ahkan bawui ya=taa-i hokuwut*], *ahku*...
- c. [*ahka-i ya=taan bawui hokuwut*], *ahku*...  
 ‘[In order for the wild pig not to be able to move], I...’



Additionally, (57) shows that two target auxiliaries *harun* and *ya=taan* doubly involve the same bound pronominal which shares the same referent with an overt subject.

- (57) a. *ahku haru-k(ku) ya=taa-k(ku) sokula* (elicited)  
 1SG[SBJ] just.now-1SG NEG=know-1SG school  
 ‘Just now, I have not been able to go to school.’
- b. *ihko haru-m ya=taa-m sokula*  
 ‘Just now, you have not been able to go to school.’
- c. *Widi haru-i ya=taa-i sokula*  
 ‘Just now, Widi has not been able to go to school.’

It should be noted here that bound pronominals in each sentence are obligatorily suffixed to all target auxiliaries at the same time (irrespective of whether or not a full subject phrase is present) as can be seen in the ungrammatical judgements in (58).

- (58) a. \**ahku/ihko/Widi harun ya=taa-k(ku)/-m/-i sokula* (elicited)  
 1SG/2SG/PSN[3] just.now NEG=know-1SG/2SG/3 school
- b. \**ahku/ihko/Widi haru-k(ku)/-m/-i ya=taan sokula*  
 1SG/2SG/PSN[3] just.now-1SG/2SG/3 NEG=know school
- c. \**ahku/ihko/Widi harun ya=taan sokula*

On the other hand, pronominal clitics are also potentially double-marked on two elements. However, the double-marking of pronominal clitics might be seen as more awkward than that of suffixes above, as shown by <sup>%</sup>*nain=ko eam=ko...* in (59b), <sup>%</sup>*nain=ko tou=mu...*, and <sup>%</sup>*nain=ko tou=ko...* in (59c).

- (59) a. *olu=ku eam=ku taa-i,* (elicited)  
 although=1SG NEG=1SG know-3[OBJ]  
 ‘Although I do not know it,’
- b. *nain=ko eam(=mu / <sup>%</sup>=ko) nokuh anan*  
 later=2SG NEG(=2SG/=2SG) toward there  
 ‘Later, you don’t go there’
- c. *nain=ko tou( <sup>%</sup>=mu / <sup>%</sup>=ko) nokuh anan*  
 later=2SG can(=2SG/=2SG) toward there  
 (Later, you can go there)

To recapitulate, how might the multiple occurrence of bound pronominals within the domain of clause in Dohoi be interpreted? Corbett (2006) proposes a heuristic, which was hinted at by Georgopoulos (1991:56)<sup>21</sup>: “If there is more than one target within the clause [...], then we are dealing with agreement. [...] it is based on the intuition that we do not expect a pronoun to be repeated” (Corbett 2006:109). This paper follows this heuristic

<sup>21</sup> The Palauan pronominal subject prefix may be ‘doubled’ within the same irrealis/hypothetical clause, targeting on both auxiliary and verb as shown in the following examples:

and sees subject pronominal suffixes within the clause as agreement markers. With regard to pronominal clitics, it is difficult to see them as agreement markers except when they attach to the auxiliary-like negative particle *eam*. As already seen in (53), *eam* can co-occur with a full subject argument, and the judgements in (59) suggest that only *eam* can tolerate the redundant double-marking.

Moreover, Corbett (2003:164) and Corbett (2006:26–27) present three general principles for canonical agreement:

**Principle I:** Canonical agreement is redundant rather than informative

**Principle II:** Canonical agreement is syntactically simple

**Principle III:** The closer the expression of agreement is to canonical (i.e., affixal) inflectional morphology, the more canonical it is as agreement

The multiple occurrence of bound pronominals within the domain of clause in Dohoi can be considered to fall under **Principle I** since it is undoubtedly related to redundancy. Furthermore, the phenomenon of multiple occurrence can be seen as an evidence supporting the idea that the multiply marked bound pronominals are more canonical agreement markers than the uniquely marked “ambiguous (or pronominal) agreement markers”.

### 3.2 Conjoined noun phrases and sylleptic dual markers

Agreement phenomena in Dohoi are basically syntactic, neither semantic nor pragmatic in nature. There are no examples such as English *committee* which can trigger singular as well as plural number agreement (e.g., *The committee has decided.* vs. *The committee have decided.*). This means that subject agreement in Dohoi allows neither semantically nor pragmatically chosen forms.

On the other hand, when the 3rd person subject nominals are conjoined, resulting in a noun phrase in dual or plural number, there are three syntactic options of agreement markers as shown in (60).

- (60) a. *Yoga doro<sup>22</sup> Widi haru-i sokula* (elicited)  
 PSN[3] 3.both PSN[3] just.now-3 school
- b. *Yoga doro Widi harun=do sokula*  
 PSN[3] 3.both PSN[3] just.now=3PL school

- 
- (i) a. *A mubi ɛl k-bo ku-mes ɛr ngii a mubi ɛr a Doi.* (Josephs 1975:109)  
 movie NMLZ 1SG-FUT 1SG-see P 3SG movie P German  
 ‘The movie which I am going to see is a German movie.’
- b. *Ngara ɛl mubi a cho-bo (cho)mo-mes ɛr ngii?*  
 what.kind.of movie 2-FUT 2-see P 3SG  
 ‘What kind of movie are you going to see?’
- c. *A lɛ-bo l-seçer a Droteo, e ng diak lɛ-bo ɛr a skuul.*  
 3-FUT 3-sick PSN NEG 3-FUT P school  
 ‘If Droteo gets sick, he won’t go to school.’

<sup>22</sup> Particle *doro* ‘both of them, (s)he with’ is preferred for the 3rd person conjuncts than using a general coordinating conjunction *tutang* ‘and’.

- c. *Yoga doro Widi harun doro sokula*  
 PSN[3] 3.both PSN[3] just.now **3.both** school  
 ‘Both Yoga and Widi have just started going to school.’ (same as above)

The conjoined subject noun phrase *Yoga doro Widi* obligatorily triggers agreement on the auxiliary *harun* involving (a) the 3rd person pronominal suffix *-i*, (b) the 3rd person plural pronominal clitic *=do*, or (c) the 3rd person dual particle *doro*. Notice that the distribution of *doro* can be adpositional as well as (pro)nominal. The one between nominals *Yoga* and *Widi* is adpositional, while the one that immediately follows the auxiliary *harun* in (60c) is (pro)nominal.<sup>23</sup>

When these three options of agreement markers are considered from the viewpoint of agreement features, the following feature structures can be assumed for (60a), (60b), and (60c) respectively. (61) shows that person agreement is obligatory while number agreement is optional. Moreover, as shown in (61b) and (61c), the feature ‘dual/plural’ can be conceived as either ‘plural’ or ‘dual’.

- (61) a.  $\left[ \begin{array}{l} (Yoga\ doro\ Widi) \\ \text{PERSON: } \mathbf{3} \\ \text{NUMBER: } \text{dual/plural} \end{array} \right] \quad \left[ \begin{array}{l} (-i) \\ \text{PERSON: } \mathbf{3} \\ \text{NUMBER: } (\text{unspecified}) \end{array} \right]$
- b.  $\left[ \begin{array}{l} (Yoga\ doro\ Widi) \\ \text{PERSON: } \mathbf{3} \\ \text{NUMBER: } \text{dual/plural} \end{array} \right] \quad \left[ \begin{array}{l} (=do) \\ \text{PERSON: } \mathbf{3} \\ \text{NUMBER: } \text{plural} \end{array} \right]$
- c.  $\left[ \begin{array}{l} (Yoga\ doro\ Widi) \\ \text{PERSON: } \mathbf{3} \\ \text{NUMBER: } \text{dual/plural} \end{array} \right] \quad \left[ \begin{array}{l} (doro) \\ \text{PERSON: } \mathbf{3} \\ \text{NUMBER: } \text{dual} \end{array} \right]$

By contrast, when the subject is the 2nd person dual, there is only one (optional) agreement marker *boro*. The subject *boro* or *boro Widi* may only optionally ‘control’ the feature value ‘2nd person dual’. They cannot control the feature value ‘2nd person plural/singular’ nor ‘3rd person’ as shown in (62b) and (62c). In its adpositional use, *boro* usually functions as “syllaptic dual” (Plank 1989:327n22)<sup>24</sup> as *boro Widi* meaning ‘both Widi and you’ (thus, ‘you and Widi’ cannot be literally translated as *\*ihko boro Widi*).

- (62) a. *boro (Widi) harun (boro) sokula* (elicited)  
 2.both (PSN) just.now (**2.both**) school  
 ‘You two (including Widi, both Widi and you) have just started going to school.’
- b. *\*boro (Widi) harun=**mi** sokula* (just.now=**2PL**)
- c. *\*boro (Widi) haru-**m**/haru-**i** sokula* (just.now-**2SG/-3**)

<sup>23</sup> The (pro)nominal use of *doro* is fully acceptable, so that the subject phrase in (60) can be replaced with *doro*: *doro harui sokula*, *doro harun=do sokula*, or *doro harun doro sokula* ‘Both of them have just started going to school’.

<sup>24</sup> Corbett (2000:233n11) cites Plank’s description: “Pronouns in the syllaptic dual refer to a pair, and are accompanied by a noun denoting the subordinate member of the pair and already included in the pronominal reference (as, e.g., in Old English *wit Scilling* ‘both Scilling and I’, lit. ‘we-two Scilling’)”.

The same situation is found with the 1st person dual *koro*.

- (63) a. *koro (Widi) harun (koro) sokula* (elicited)  
 1.both (PSN) just.now (**1.both**) school  
 ‘We two (including Widi, both Widi and I) have just started going to school.’
- b. \**koro (Widi) harun=**kai** sokula* (just.now=**1PL.EXCL**)
- c. \**koro (Widi) haru-k/haru-i sokula* (just.now=**1SG/-3**)

What is important here is that there may be room for the feature value ‘dual’ being introduced into the agreement system in Dohoi. At least in the 1st and 2nd person, ‘dual’ and ‘plural’ are distinguished (probably due to the sylleptic nature of *koro* and *boro*).

#### 4. Conclusion

On the basis of the synchronic descriptions of bound pronominals, this paper elucidates that two West Barito languages, Ngaju and Dohoi show certain covariances, or syntactic agreement in person-number between subject controllers and targets (=conjunction/adverb/auxiliary) within the domain of clause. The agreement markers in West Barito are only quasi-inflectional in that they can attach to limited members of each word class, and in many cases, they are ambiguous in that their controllers do not always occur in the same clauses. Nevertheless, in some cases in Dohoi, they are better characterized as more canonical than ambiguous because a single agreement marker can be doubly attached to different targets. Thus, in Dohoi, pronominal subject suffixes are agreement markers that have been more strongly grammaticalized from incorporated pronominal arguments (although their bases are limited), whereas pronominal subject clitics and personal dual particles are only (incorporated) pronominal arguments except for the ones which attach to the negative particle *eam* ‘not’.

#### Abbreviations

1	first person	EXP	experiential perfect
2	second person	FOC	focus
3	third person	FUT	future
<b>A</b>	<b>Pattern A</b>	HD	Hardeland’s Dictionary (1859)
<b>A’</b>	<b>Pattern A’</b>	HG	Hardeland’s Grammar (1858)
ABL	ablative	INCL	inclusive
AN	anaphoric	INS	instrumental
<b>B</b>	<b>Pattern B</b>	IPFV	imperfective
BEN	benefactive	LK	linker
<b>C</b>	<b>Pattern C</b>	LOC	locative
<b>C’</b>	<b>Pattern C’</b>	NEG	negative
C	consonant	NMLZ	nominalizer in
CLF	classifier		modification-use / NP-use
COM	comitative	NP	noun phrase
COMP	complementizer	OBJ	object
DAT	dative	P	preposition
DEF	definite	PFV	perfective
DEM	demonstrative	PL	plural
DU	dual	PLN	place name
EXCL	exclusive	PMP	Proto Malayo-Polynesian

PP	prepositional phrase	SBJ	subject
PRF	perfect	SG	singular
PSN	person name	SRD	subordinator
PURP	purposive	SUPER	superlative
RECP	reciprocal	V	vowel

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